

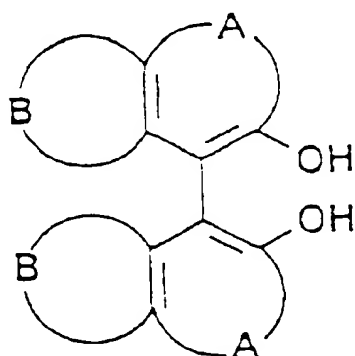
where nonadjacent groups $=\text{CR}-$ are optionally replaced by $=\text{N}-$, and $-\text{CHR}-$ are optionally replaced by $-\text{NR}-$, $-\text{O}-$ or $-\text{S}-$, provided that at least one $=\text{CR}-$ or $-\text{CHR}-$ group is so replaced,

and

R is alkyl or alkoxy having from 1 to 12 carbon atoms, halogen, $-\text{CN}$, $-\text{CF}_3$, $-\text{OCF}_3$ or unsubstituted phenyl or phenyl which is monosubstituted or polysubstituted by alkyl or alkoxy having from 1 to 12 carbon atoms, halogen or $-\text{CN}$, where if more than one R is present the substituents R may be identical or different.

3. (Twice Amended) A compound of the formula I according to Claim 1, wherein R is alkyl or alkoxy having from 1 to 7 carbon atoms, F, Br, CN, $-\text{CF}_3$, $-\text{OCF}_3$.

5. (Amended) A process for preparing a compound of claim 1, which comprises reacting a compound of the formula II:



II

where A and B are as defined with a perfluoro-n-alkanesulfonyl fluoride, chloride or anhydride in the presence of a base.

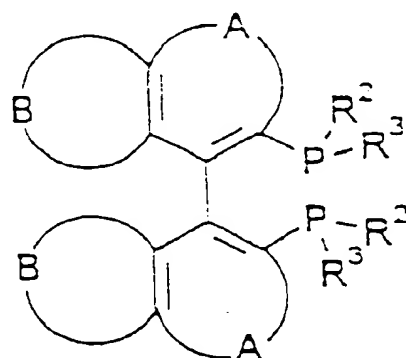
6. (Amended) The process of Claim 5, wherein the compounds of the formula II are reacted with nonafluoro-n-butesulfonyl fluoride or perfluoro-n-octanesulfonyl fluoride in the presence of a base.

7. (Twice Amended) The process of Claim 5, wherein the base used is a pyridine, a pyrimidine, a pyridazine, a trialkylamine or a dialkylarylamine.

Cancel claims 2, 4 and 8-10 without prejudice or disclaimer.

Please add the following new claims 11-21.

-- 11. A method for preparing a diphosphine of formula III using a bis(perfluoro-n-alkanesulfonate) compound of the formula I of claim 1, which comprises reacting a compound of the formula I, in the presence of a transition metal and a base, with either a phosphine of the formula IV or zinc and a phosphine of the formula V:

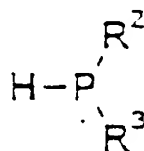


III

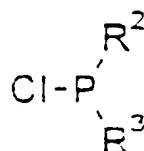
where A and B are as defined above

and

R^2 , R^3 are phenyl, 4-methylphenyl, 3-methylphenyl, 2-methylphenyl, 3,5-dimethylphenyl, 3,5-ditert-butylphenyl, 4-methoxyphenyl, 3-methoxyphenyl, 2-methoxyphenyl, 3,5-dimethoxyphenyl, cyclohexyl or cyclopentyl;



IV



V

where R^2 and R^3 are as defined above.

12. A process according to Claim 11, wherein the transition metal catalyst used is a nickel catalyst.

13. The compound of claim 1, wherein at least one R is an optically active organic radical having an asymmetric carbon.

14. The process of claim 5, wherein the reaction is conducted at a temperature of -30 °C to +70 °C.